

DAC <sup>22/11/18</sup>



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

# Ronald Paul Rohrbach

Group Art Unit: 1724

Examiner: Ivars C. Cintins

I hereby certify that the attached correspondence is being transmitted by Express Mail to the Commissioner for Patents, Alexandria, Virginia 22202-3514, on March 7, 2005

Lori Bacon  
Lori Bacon

**PETITION UNDER 37 C.F.R. § 1.183 TO SUSPEND**  
**OR WAIVE THE REQUIREMENTS OF 37 C.F.R. § 1.181(f)**

Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sirs:

Applicants hereby petition under 37 C.F.R. 1.183 for a suspension or waiver of the requirements of 37 C.F.R. § 1.181(f).

Please charge the fee required under 37 C.F.R. 1.17(h) to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

In particular, Applicants and the Undersigned ask that the two month time limit of

37 C.F.R. 1.181 (f) be waived or suspended in the instant application to allow for

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**BEST AVAILABLE COPY**

consideration and favorable action of Applicants' Petition under 37 C.F.R. 1.181. Said Petition under 37 C.F.R. 1.181 has been filed herewith and requests the withdrawal of the PTO's holding that at the time of filing, the instant application lacked copendency with Application Serial No. 09/566,034, and thus is not a proper continuation under 37 C.F.R. 1.53(b). In addition, or in the alternative, Applicants also petition under 37 C.F.R. 1.181 for the withdrawal the holding of abandonment in the parent application.

The delay in filing the 1.181 Petition was unintentional, in as much as the need to file such a Petition was not appreciated until after the expiration of the two month time period set forth in under 37 C.F.R. 1.183 (f). The Undersigned has not previously had reason to file a 1.181 Petition during her prior 14 odd years of practice before the USPTO. She greatly regrets the delay and would appreciate a one-time waiver of the requirements of 37 C.F.R. 1.181(f).

The Examiner is invited to contact the Undersigned by telephone if such would be helpful in resolving this or any other matters relating to the above application.

Respectfully submitted,

CANTOR COLBURN LLP

By: 

Mary E. Golota

Registration No. 36,814

Telephone: (248) 524-2300

Date: March 7, 2005

CORRESPONDENCE ADDRESS:

Honeywell International Inc.

Law Department Patent Services

101 Columbia Road

Morristown, NJ 07962



**PATENT**  
**(780-99-014/HO1-0010-C)**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of

Ronald Paul Rohrbach

Serial No.: 10/765,649

Filed: January 26, 2004

For: STAGED OIL FILTER  
INCORPORATING PELLETIZED BASIC  
CONDITIONER

Group Art Unit: 1724

Examiner: Ivars C. Cintins

I hereby certify that the attached correspondence is  
being transmitted by Express Mail to the Commissioner  
for Patents, Alexandria, Virginia 22313-1450 on March  
7, 2005

  
Lori Bacon

**PETITION UNDER 37 C.F.R. § 1.181 TO WITHDRAW HOLDING OF LACK OF  
COPENDENCY WITH PARENT APPLICATION OR, ALTERNATIVELY, TO  
WITHDRAW HOLDING OF ABANDONMENT IN PARENT APPLICATION**

Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sirs:

Applicants hereby petition under 37 C.F.R. 1.181(a)(1) to withdraw the holding that at the time of filing, the instant application lacked copendency with Application Serial No. 09/566,034, hereafter the "parent application" and thus is not a proper continuation under 37 C.F.R. 1.53(b). In addition, or in the alternative, Applicants petition to withdrawal the holding of abandonment in the parent application.

## REMARKS

The disclosure of the instant Application has been objected to on the grounds that it is not a "proper" continuation. In particular, the Examiner has indicated that the instant Application may not claim priority as a continuation on parent application Serial No. 09/566,034. The Examiner states:

"...this application is not a proper "continuation" of Application Serial No.09/566,034 because it lacks copendency with said prior application. A notice of appeal was filed on September 30, 2003 in Application Serial No. 09/566,034; and since Applicant did not file an appeal brief within 2 months from the date of the notice of appeal, nor did Applicant obtain an extension of time to file this brief, this prior application went abandoned on December 1, 2003. Accordingly, since the instant application was filed on January 26, 2004, it lacks copendency with the prior application which went abandoned on December 1, 2003.

*(Office Action of December 7, 2004, page 2, 1<sup>st</sup> paragraph.)*

Applicants and the Undersigned greatly appreciate the detailed review of the application but must respectfully disagree and submit that a petition for an extension of time was requested sufficient to maintain copendency with the parent application.

**Attachments I, II, III, and IV** are submitted herewith as evidence to establish copendency and/or the withdrawal of the holding of abandonment in the parent application.

**Attachment I** is a copy of the Utility Patent Application Transmittal submitted on January 26, 2004. As indicated therein, the instant application was filed as a continuation under 1.53 (b) and claimed priority upon parent application Serial No. 09/566,034.

**Attachment II** is a copy of the cover letter of January 26, 2004. As indicated

therein, the cover letter included a petition under 37 CFR 1.136 for a petition for an extension of time. Included therein was the following petition for an extension of time:

“Applicant hereby petitions under 37 CFR 1.136 and other applicable rules to have the response period extended the number of months necessary to render the attached communication timely in the event a petition is required.”

*(Application Transmittal of Jan. 26, 2004)*

**Attachment III** is a copy of the Preliminary Amendment filed with the submission of January 26, 2004. Page 1 of the Preliminary Amendment states

This preliminary amendment is submitted with the filing papers for a continuation application under 37 CFR 1.53 (b). Reconsideration is respectfully requested in view of the following amendments and/or remarks. A Notice of Appeal was filed on September 25, 2003. Accordingly, a Petition for a Two-Month Extension of Time is attached herewith. The Commissioner is hereby authorized to charge to Deposit Account No. 06-1130 the necessary extension fees identified in the attached Petition and any other fees necessary for entry of this amendment.

*(Preliminary Amendment of 1/26/04, page 1.)*

**Attachment IV** is a copy of the return receipt postcard with the PTO stamp acknowledging receipt of the submission of January 26, 2004, including the Application Transmittal, the cover letter and the Preliminary Amendment.

As indicated in Attachments I and III, Applicants requested the filing of a continuation application under 37. C.F.R 1.53(b). Such a request requires copendency with the identified parent application.

The Petition for the Two Month Extension of Time is set forth in the cover letter (Attachment II) and is referenced in the Preliminary Amendment (Attachment III).

The filing of the continuation application (Attachment I) required copendency with the parent application. The need for copendency with the parent application ‘triggered’ the petition set forth in Attachment II. That is, the filing of a continuation application

could not be "timely" unless a Two Month Extension of Time was obtained with regards to the parent application.

Accordingly, as evidenced in Attachments I, II, III, and IV, Applicants sought a Petition for a Two Month Extension of Time in the submission of January 26, 2004 via the cover letter of Attachment II.

In view of Applicants' request for a Two Month Extension of Time, there was copendency between the instant application and the parent application.

Accordingly, Applicants hereby petition to withdraw the holding that at the time of filing, the instant application lacked copendency with Application Serial No. 09/566,034, and thus is not a proper continuation under 37 C.F.R. 1.53(b). In addition, or in the alternative, Applicants petition to withdrawal the holding of abandonment in the parent application.

Pursuant to MPEP § 711.03(c), no fee is believed to be required for the present Petition under 37 C.F.R. 1.181. However if there are any charges due with respect to this Petition or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

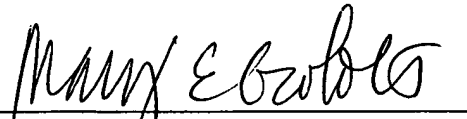
The Applicants and the Undersigned also note that a Petition under 37 C.F.R. 1.183 has also been filed herewith, requesting that the two month time limit of 37 C.F.R. 1.181 (f) be waived or suspended in the instant application. The fee required per 37 C.F.R. 1.17(h) for the 1.183 Petition has been submitted herewith. The delay in filing the 1.181 Petition was unintentional, in as much as the need to file such a Petition was not appreciated until after the expiration of the two month time period set forth in under 37 C.F.R. 1.183 (f).

The Examiner is invited to contact the Undersigned by telephone if such would

be helpful in resolving this or any other matters relating to the above application.

Respectfully submitted,

CANTOR COLBURN LLP

By: 

Mary E. Golota

Registration No. 36,814

Telephone: (248) 524-2300

Date: March 4, 2005

CORRESPONDENCE ADDRESS:

Honeywell International Inc.

Law Department Patent Services

101 Columbia Road

Morristown, NJ 07962

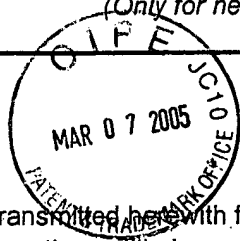


**UTILITY PATENT APPLICATION TRANSMITTAL  
(Large Entity)**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
HO1-0010

Total Pages in this Submission

**TO THE COMMISSIONER FOR PATENTS**Mail Stop Patent Application  
P.O. Box 1450  
Alexandria, VA 22313-1450

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**STAGED OIL FILTER INCORPORATING PELLETTIZED BASIC CONDITIONER**

and invented by:

**Ronald P. Rohrbach, Gordon W. Jones, Peter D. Unger, Daniel E. Bause, Lixin L. Xue and Greg Kemenah**If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: 09/566,034

Which is a:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Enclosed are:

**Application Elements**

1. ☒ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 22 pages and including the following:
  - a. ☒ Descriptive Title of the Invention
  - b. ☐ Cross References to Related Applications (if applicable)
  - c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)
  - d. ☐ Reference to Sequence Listing, a Table, or a Computer Program Listing Appendix
  - e. ☒ Background of the Invention
  - f. ☒ Brief Summary of the Invention
  - g. ☒ Brief Description of the Drawings (if filed)
  - h. ☒ Detailed Description
  - i. ☒ Claim(s) as Classified Below
  - j. ☒ Abstract of the Disclosure

# UTILITY PATENT APPLICATION TRANSMITTAL (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
HO1-0010

Total Pages in this Submission

## Application Elements (Continued)

3. ☒ Drawing(s) (when necessary as prescribed by 35 USC 113)
- a. ☒ Formal                      Number of Sheets 7
- b. ☐ Informal                      Number of Sheets \_\_\_\_\_
4. ☒ Oath or Declaration
- a. ☐ Newly executed (original or copy)                      ☐ Unexecuted
- b. ☒ Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional application only)
- c. ☒ With Power of Attorney                      ☐ Without Power of Attorney
- d. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference (usable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☐ CD ROM or CD-R in duplicate, large table or Computer Program (Appendix)
7. ☐ Application Data Sheet (See 37 CFR 1.76)
8. ☐ Nucleotide and/or Amino Acid Sequence Submission (if applicable, all must be included)
- a. ☐ Computer Readable Form (CRF)
- b. ☐ Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statement(s) Verifying Identical Paper and Computer Readable Copy

## Accompanying Application Parts

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(B) Statement (when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement/PTO-1449                      ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☒ Certificate of Mailing
- ☐ First Class                      ☒ Express Mail (Specify Label No.): EV 381369128

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

**Total Pages in this Submission**

17. ☐ Additional Enclosures (*please identify below*):


18. ☐ Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.

### Warning

***An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.***

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Large Entity)**

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

Docket No.  
HO1-0010

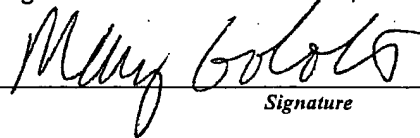
Total Pages in this Submission

**Fee Calculation and Transmittal**

**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	15	- 20 =	0	x \$18.00	\$0.00
Indep. Claims	5	- 3 =	2	x \$86.00	\$172.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
BASIC FEE					\$770.00
OTHER FEE (specify purpose) _____					\$0.00
TOTAL FILING FEE					\$942.00

- ☐ A check in the amount of \_\_\_\_\_ to cover the filing fee is enclosed.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. 06-1130 as described below.
- ☒ Charge the amount of \_\_\_\_\_ as filing fee.
- ☒ Credit any overpayment.
- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

  
Signature

Dated:

cc:

Mary E. Golota  
Reg. No. 36, 814  
Phone: 248-524-2300  
Fax: 248-524-2700  
201 West Big Beaver, Suite 370  
Troy, MI 48084

January 26, 2004

## MAIL STOP PATENT APPLICATION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Re: New United States Patent Application

Inventors: Rohrbach et al.

Entitled: STAGED OIL FILTER INCORPORATING PELLETTIZED BASIC  
CONDITIONER

Attorney Docket No: 780-99-014 (HO1-0010)

Filed: Herewith



Sir:

We enclose herewith:

- ☒ Utility Patent Application Transmittal (large entity)
- ☒ Non provisional application for Patent Cover Sheet (Large entity)
- ☒ Patent application (22 pages), including specification (17 pages), claims (4 pages), and abstract (1 page)
- ☒ Executed assignment
- ☒ Recordal coversheet for assignment
- ☒ Executed declaration
- ☒ Certificate of Mailing by "Express Mail" (37 CFR 1.10)
- ☒ Drawings: seven (7) sheets (formal)
- ☒ Two (2) Acknowledgement Postcards

The Commissioner is hereby authorized to charge payment of the fees associated with this communication or credit any overpayment to Deposit Account No. 06-1130.

Applicant hereby petitions under 37 CFR 1.136 and other applicable rules to have the response period extended the number of months necessary to render the attached communication timely in the event a petition is required.

Respectfully submitted,

Mary E. Golota

Reg. No. 36,814

Phone: 248-524-2300

Fax: 248-524-2700

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: MAIL STOP PATENT APPLICATION Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 26, 2004, Express Mail No. EV 381369128 US.

Angela Singleton



**PATENT**  
(Practitioner's Docket No. HO-0010)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of Rohrbach et al.

Serial No.: Unknown

Group Art Unit: 1724

Filed: Herewith

Examiner: I. Cintins

For: STAGED OIL FILTER  
INCORPORATING PELLECTIZED BASIC  
CONDITIONER

**PRELIMINARY AMENDMENT UNDER 37. CFR § 1.111**

Commissioner for Patents  
Alexandria, Virginia 22202-3514  
Dear Sir:

**INTRODUCTORY REMARKS**

This preliminary amendment is submitted with the filing papers for a continuation application under 37 CFR 1.53 (b).

Reconsideration is respectfully requested in view of the following amendments and/or remarks: A Notice of Appeal was filed on September 25, 2003. Accordingly, a Petition for a Two-Month Extension of Time is attached herewith.

The Commissioner is hereby authorized to charge to Deposit Account No. 06-1130 the necessary extension fees identified in the attached Petition and any other fees necessary for entry of this amendment.

Please make the following amendments to the Application as set forth below.

## AMENDMENTS TO THE SPECIFICATION

At page 1, line 4, please insert the following new paragraph:

This application claims priority as a continuation of Serial No. 09/566,034, filed May 8, 2000.

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## AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below.

1. (Previously Presented) An oil filter, comprising:

a hollow housing having an inlet and outlet in defining a chamber therein with a flow path between the inlet and the outlet;

~~a mechanically active filter member disposed inside the housing in the flow path; and~~

a chemically active filter member disposed inside the housing in the flow path;

wherein the chemically active filter member comprises a plurality of pellets, retained within said filter so as to provide an oil flow path through said chemically active filter member and past said pellets during operation, said pellets having a diameter in a range of 0.10 to 3 mm, said pellets comprising:

a polymeric binder which is present in a range of 3-20 percent by weight of the total weight of the pellet; and

a basic salt selected from the group consisting of calcium carbonate, potassium carbonate, potassium bicarbonate, aluminum dihydroxy sodium carbonate, magnesium oxide, magnesium carbonate, zinc oxide, sodium bicarbonate, sodium hydroxide, calcium hydroxide, potassium hydroxide, and mixtures thereof, the basic salt being present in a range of 80-97 percent by weight of the total pellet weight.

2.(Original) The oil filter of claim 1, wherein the polymeric binder is selected from the group consisting of polyamides, polyimides, polyesters, polyolefins, polysulfones, and mixtures thereof.



3. (Original) The oil filter of claim 1, wherein the mechanically active filter element is substantially cylindrical in shape, and wherein the chemically active filter element is also substantially cylindrical in shape and is disposed radially and coaxially inside of said the mechanically active filter element.

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4. (Original) The oil filter of claim 1, wherein the pellets of the chemically active filter member are connected together to form a substantially integral permeable member.

5. (Currently Amended) The oil filter of claim 1, wherein the pellets comprise the result of a process ~~are a product of a process~~ comprising the steps of:

providing the polymeric binder in a finely divided form;  
mixing the polymeric binder with a basic salt in a liquid solvent; and  
forming a mixture of binder in salt into pellets; and removing the salt from the pellets by evaporation.

6. (Original) The oil filter of claim 5, wherein the solvent used in pellet formation is organic solvent.

7. (Previously Presented) An oil filter, comprising:

a hollow housing having a base plate for placement proximate and engine surface, said base plate having an outlet aperture formed therethrough and inlet aperture formed therethrough in spaced apart from said outlet aperture;

a mechanically active filter element disposed within said housing spaced away from said base plate;

a substantially cylindrical dividing wall member disposed within said housing adjacent said base plate;

said dividing wall member defining an inlet flow channel on the outside thereof within the housing in fluid communication with said inlet aperture of said base plate,

said dividing wall member further defining an outlet flow channel therein in fluid communication with said outlet aperture of said base plate; and

a chemically active filter member disposed within said inlet flow channel of said housing between said base plate and said mechanical filter element,

said chemically active filter member comprising a plurality of pellets, retained within said filter so as to provide an oil flow path through said chemically active filter member and past said pellets during operation, said pellets having a diameter in a range of 0.10 to 5 mm, said pellets comprising:

a polymeric binder which is present in a range of 3-20 percent by weight of the total weight of the pellet; and

a basic salt selected from the group consisting of a basic salt selected from the group consisting of calcium carbonate, potassium carbonate, potassium bicarbonate, aluminum dihydroxy sodium carbonate, magnesium oxide, magnesium carbonate, zinc oxide, sodium bicarbonate, sodium hydroxide, calcium hydroxide, potassium hydroxide, and mixtures thereof, the basic salt being present in a range of 80-97 percent by weight of the total pellet weight.

8. (Original) The oil filter of claim 7, further comprising a foraminous divider disposed between the chemically active filter element and the mechanically active filter element.

9. (Currently Amended) The oil filter of claim 7, wherein the pellets of the chemically active filter element comprise there~~are~~ a product of a process comprising the steps of:

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providing the polymeric binder in a finely divided form;

mixing the polymeric binder with a basic salt in a liquid solvent;

forming a mixture of binder in salt into pellets; and

removing the solvent from the pellets by evaporation.

10. (Previously Presented) A supplemental cartridge for use in conjunction with an oil filter, said a supplemental cartridge comprising:

a hollow housing, comprising

a base plate for placement proximate and engine surface, said base plate having an outlet aperture formed substantially centrally therethrough and inlet aperture formed therethrough and spaced apart from said outlet aperture;

a cap opposite said base plate for placement proximate an oil filter, said cap having an inlet aperture formed substantially centrally therethrough and an outlet aperture formed therethrough and spaced apart from said inlet aperture;

an outer wall connecting said cap and said base plate; a substantially cylindrical dividing wall member disposed within said housing and separating said housing interior into an inlet flow channel in fluid communication with said inlet aperture of said base plate, and an outlet flow channel in fluid communication with said outlet aperture of said base plate; and

a chemically active filter member disposed within said inlet flow channel of said housing, said chemically active filter member comprising a plurality of pellets, retained within said cartridge so as to provide an oil flow path through said chemically active filter member and past said pellets during operation, said pellets having a diameter in a range of 0.1 to 5 mm, said pellets comprising:

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a polymeric binder which is present in a range of 3-20 percent by weight of the total weight of the pellet; and

a basic salt selected from the group consisting of calcium carbonate, potassium carbonate, potassium bicarbonate, aluminum dihydroxy sodium carbonate, magnesium oxide, magnesium carbonate, zinc oxide, sodium bicarbonate, sodium hydroxide, calcium hydroxide, potassium hydroxide, and mixtures thereof, the basic salt being present in a range of 80-97 percent by weight of the total pellet weight.

11. (Original) The supplemental cartridge of claim 10, wherein the pellets of the chemically active filter element bar a product of a process comprising the steps of:

- separating the polymeric binder into a finely divided form;
- mixing of the polymeric binder with a basic salt and a liquid solvent;
- forming a mixture of binder in salt into pellets; and
- removing the solvent from the pellets by evaporation.

12. (Original) The supplemental cartridge of claim 10, further comprising:

an auxiliary inlet tube attached to said outer wall of said housing and being in fluid communication with said inlet flow channel thereof; and

an auxiliary outlet tube attached to said outer wall of said housing and being in fluid communication with said interior thereof.

13.(New) An oil filter, comprising:

a housing having an inlet and outlet in defining a chamber therein with a flow path

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between the inlet and the outlet;

a mechanically active filter member disposed inside the housing in the flow path; and

a chemically active filter member disposed inside the housing in the flow path and comprising a plurality of pellets having a diameter in a range of 0.10 to 3 mm and comprising:

a polymeric binder present in an amount of from 3-20 percent by weight, based on the total pellet weight; and

a basic salt present in an amount of from 80-97 percent by weight, based on the total pellet weight,

wherein the plurality of pellets are bonded together or cohesively associated with one another to form a substantially integral but porous chemically active filter member that is self-supporting.

14.(New) The oil filter of claim 13 wherein the polymer binder is selected from the group consisting of polyamides, polyimides, polyesters, polysulfones, and mixtures there.

15. (New) An oil filter, comprising:

a housing having an inlet and outlet in defining a chamber therein with a flow path between the inlet and the outlet; and

a chemically active filter member disposed inside the housing in the flow path and comprising a plurality of pellets having a diameter in a range of 0.10 to 3 mm and comprising:

a polymeric binder present in an amount of from 3-20 percent by weight, based on the total pellet weight; and

a basic salt present in an amount of from 80-97 percent by weight, based on the total pellet weight,

wherein the plurality of pellets are bonded together or cohesively associated with one another to form a substantially integral but porous chemically active filter member that is self-supporting.

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## REMARKS

### 1. New Claims 13-15.

New claims 13-15 have been added in an attempt to better define the claimed invention. No new matter has been added with these claims. Support for new claims 13-15 may be found on page 11, lines 11-14 and in Figure 6. Favorable action as to these claims is respectfully requested.

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### 2. Rejection of claims 1, 2, and 4-12 under 35 U.S.C. §103(a) as obvious over Brownawell, U.S. Patent No. 5,225,081, hereafter "Brownawell" or "081" in view of DeJovine, U.S. Patent No. 4,144,166, hereafter "DeJovine" or "166".

Applicants greatly appreciate the detailed basis of rejection set forth in the Office Action of June 25, 2003 and again in the Interview Summary of December 23, 2003. However, Applicants continue to respectfully submit that the claims are patentable over the cited rejection.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 2143.

This standard has not been met in the instant case, both with respect to independent claim 1, 7, and 10, as well to new independent claims 13 and 15.

First, Applicants wish to clarify the basis of rejection and the teachings of the cited references.

Brownawell discloses a filter system having an active filter media containing a chemically active filter media, a physically active filter media or a combination thereof. The active filter media is in the form of a hollow composite formed from the active filter media and a thermoplastic binder. Brownawell is primarily concerned with the use of this hollow composite and the PTO appears to rely on the embodiments using the hollow composite for the disclosure of an oil filter having both a mechanically active filter member and a chemically active filter member.

However, the PTO also appears to be relying on a 2-stage filter disclosed in Figure 6 of Brownawell for the disclosure of discrete particles. In this embodiment, a first and separate housing 132 contains discrete particles of what can be a chemically active filter media 130. '081, *col. 13, lines 18-19*. This first housing 132 must be used in conjunction with a separate housing 104 that contains both the claimed hollow composite 112 and an inactive filter media 110. Nothing in Brownawell appears to disclose using the housing 132 containing the discrete particles of active filter media 130 in combination with an inactive filter media. Rather, Brownawell appears to use the inactive filter media solely with the hollow composite, i.e., see '081, *col. 12, lines 45-51*.

Applicants note that it is only in the housing 132 in Brownawell's Figure 6 that the chemically active filter media may be in the form of pellets and then only if the chemically active filter media is selected to be supported on a substrate in the shape of pellets. See '081, *col. 2, lines 3-12*. Per the overall teachings of the '081 patent, the chemically active filter media used in housing 104 in Figure 6 may only be present in the form of a hollow solid composite formed from the chemically active filter media and a thermoplastic binder. Thus, no pellets comprising a chemically active filter media are used with the inactive filter media of Brownawell.

The secondary reference DeJovine is relied upon for its disclosure of a relatively insoluble polymer support media. DeJovine discloses a solid thermoplastic polymer having a controlled rate of dissolution in oil, the polymer containing particles that are intentionally released into the oil as a function of the controlled rate of dissolution of the polymer. The PTO appears to rely on DeJovine's disclosure that some polymers having a controlled rate of dissolution into oil are 'relatively oil-insoluble'.

In contrast, Applicants' inventions of independent claims 1, 7, and 10 require a hollow housing that contains *both* a mechanically active filter member and a chemically active filter member disposed within a housing. It is assumed that the PTO is relying on Brownawell's inactive filter media 110 for the disclosure of Applicants' required mechanically active filter member. Moreover, as set forth in new independent claims 13 and 15, Applicants' chemically active filter member must have a plurality of pellets that are comprised of from 80-97% by weight of a basic salt and from 3-20% by weight of a polymeric binder and that are bonded



together or cohesively associated with one another to form a substantially integral but porous chemically active filter member that is self-supporting.

The cited combination of references fails to provide a prima facie case of obviousness as to any of these claimed inventions.

With respect to independent claims 1, 7, and 10, The PTO states that it would have been obvious to one of ordinary skill in the art to provide the chemically active filter media of Brownawell with the relatively oil-insoluble polymer support material of DeJovine, in order to facilitate handling of the chemically active filter media of Brownawell. *Office Action of 6/25/03, pg. 3* The PTO deems this modification to "be especially obviousness in view of the disclosure by Brownawell '081 that the chemically active filter media may be supported on a substrate which is the same as, or different from, the composite media." *Office Action of 6/25/03, pg. 3, citations omitted.*

However, the discussion in Brownawell in col. 2, lines 3-12 as to the support of the chemically active filter media on a substrate in no way supports the PTO's stated basis of rejection. Rather, the disclosure at col. 2, lines 3-12 of Brownawell '081 merely indicates that the chemically active materials may be supported on substrates such as alumina, activated clay, cellulose, cement binder, silica-alumina, activated carbon and the like. Brownawell continues on to state that such *substrates* may be in the form of pellets, cylinders, or spheres. Nothing in Brownawell indicates that pellets that comprise *both* a chemically active material and a thermoplastic could be used in the housing 104 of Figure 6.

The PTO's suggestion that DeJovine's oil insoluble polymer could be used to bind the discrete pellets in the housing 132 of Figure 6 is unsupported by the cited combination of references. MPEP 2143 requires that the motivation to do what Applicants have done come from the cited references. Even if the teachings of a primary reference could be modified to arrive at the claimed subject matter, the modification is not obvious unless the prior art also suggests the *desirability* of such a modification. *In re Laskowski*, 10 U.S.P.Q.2d 1397, 1398 (Fed Cir. 1989). There must be a teaching in the prior art for the proposed combination or modification to be proper. *In re Newell*, 13 U.S.P.Q.2d 1248 (Fed Cir. 1989). Thus, the PTO's suggestion that a desire to improve handling is sufficient motivation fails to satisfy the requirements of a prima

facie case of obviousness. No support or evidence has been offered to show that this motivation comes from the cited references.

Moreover, even if such motivation did exist, the resultant combination with the discrete particles of Brownawell's housing 132 fails to provide the oil filters of Applicants' claims 1, 7, 10, and 13. That is, housing 132 fails to include a mechanically active filter member. Nor has the PTO offered any suggestion as to why the solid hollow composite 112 in housing 104 would be replaced by the mixture of the discrete particles and the polymer of DeJovine. Applicants'

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note that any such suggestion would change the entire principle of operation set forth in Brownawell. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 123 U.S.P.Q. 349 (CCPA 1959); MPEP 2143.01.

Finally, the resultant combination fails to provide a *prima facie* case as to the oil filter of Applicants' claim 15. In this case, the cited combination fails to provide Applicants' particularly required pellets, especially with respect to Applicants' required pellet size and concentration of chemically active media, i.e., the basic salt.

For example, the PTO suggests that the recited percentage of basic salt would have been obvious, "since Brownawell would clearly seek to utilize a greater amount of treatment material than support material in the chemically active filter media." *Interview summary of 12/23/03*. Applicants must respectfully disagree. Rather than suggest that concentrations of chemically active filter media greater than 40-75% be used in the solid hollow composite, Brownawell discloses the embodiment of Figure 6, i.e, a two stage oil filter system. Thus, Brownawell's answer to greater chemical activity is the addition of separate housings containing discrete particles of active filter media.

Next, the PTO suggests that one of ordinary skill in the liquid purification art would readily recognize that Applicants' recited percentage of basic salt could be achieved by melting or softening the polymer, adding the chemically active media to this melted or softened polymer, and then cooling the resultant product to form the recited material. *Interview summary of 12/23/03*. Again, Applicants must respectfully disagree.

First, Applicants note that one of ordinary skill in the liquid purification art would not recognize anything relating to polymer compounding.

Second, the process described by the PTO is merely that disclosed by Brownawell with respect to the formation of the hollow solid composite. The teachings of Brownawell indicate that 75% appears to be the maximum concentration of chemically active filter media. Thus, there is no evidence that the process suggested by the PTO would produce pellets having Applicants' required concentration of basic salt. This is especially true given that the pellet form in

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Brownawell results only from the use of substrates in pellet form. The use of substrate material would automatically decrease the concentration of the chemically active media, i.e., in Applicants' case, the basic salt.

Nor is it clear that Brownawell suggests Applicants' required pellet size. Rather, Brownawell merely discloses the size of the active filter media before it is compounded into the solid hollow composite. Nothing in Brownawell or DeJovine suggest that the combined pellet of both binder and active filter media should have a diameter of from .1 to 3 mm. Indeed, the active filter particles of Brownawell having a size of less than 0.1 mm would fail to work in Applicants' invention, because they would fail to provide Applicants' required interstitial spaces. See *Applicants' Specification, page 8, lines 6-12*.

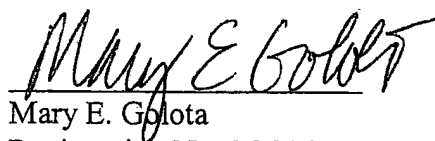
Thus, taken as a whole, the cited combination of references fails to disclose the inventions of Applicants' independent claims 1, 7, 10, 13, and 15.

### CONCLUSION

Applicant(s) respectfully submit that the Application and pending claims are patentable in view of the foregoing amendments and/or remarks. A Notice of Allowance is respectfully requested. As always, the Examiner is encouraged to contact the Undersigned by telephone if direct conversation would be helpful.

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Respectfully Submitted,



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Attorney Docket No.: HO1-0010

Applicant(s): Rohrbach et al

Serial No.: Unassigned

Filing Date: Filed herewith

Title: STAGED OIL FILTER INCORPORATING  
PELLETTIZED BASIC CONDITIONER

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